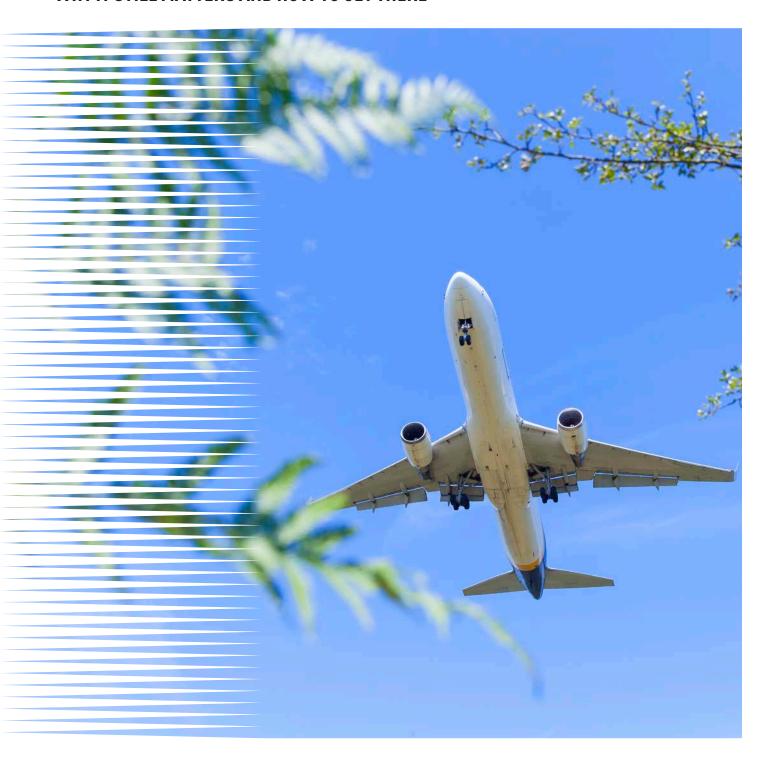


A GREENER WORLD OF TRAVEL:

WHY IT STILL MATTERS AND HOW TO GET THERE





EXECUTIVE SUMMARY

Before the COVID-19 pandemic wreaked havoc on the airline and travel market, one of the mostpressing concerns facing the industry was environmental sustainability.

Today, the air travel market remains 100 percent focused on business resilience and economic recovery. Once the crisis abates and the market stabilizes, expect the focus to return, in large part, to sustainability. Precrisis, the industry accounted for 2.4% of all global CO2 emissions, which put it front and center in sustainability debates.

In January and February 2020, before the coronavirus began to take its effect globally, OAG surveyed more than 2,000 travelers to identify how much value they place on environmentally-friendly options, how far they are willing to go to be green, and what the market can do to satisfy the growing demands for sustainability.

This OAG report explores the impact of environmental concerns on airlines, airports, online travel agents (OTA) and other providers, evaluates traveler sentiment and takes an honest look at what can be done, along with the impact of COVID-19.



SUSTAINABILITY COUNTS

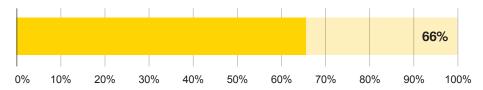
The biggest finding in OAG's survey: Sustainability matters to travelers – and has the potential to significantly impact future airline and OTA market share and brand loyalty.

In fact, 56% of all travelers and 50% of business travelers would consider switching their preferred airline if there was a more environmentally-friendly option available. The number was even higher (68%) for millennials.

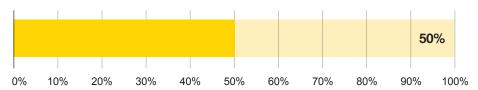
Along the same lines, 54% of all travelers, and 69% of all millennials, would be more likely to use a travel site to plan and book travel if it provided sustainability-related information to help inform purchases.

In all, many of the travelers surveyed by OAG are ready for change and are willing to explore new options to reduce their own carbon footprint. OAG found that:

66% of travelers would accept fewer daily flights to their destinations (with larger aircrafts) if it resulted in less carbon emissions.



50% of travelers would be willing to take a greener mode of transportation even if it took longer than the typical flight.



With 39 million scheduled flights a year (pre-COVID-19), the U.S. is by far the world's largest aviation market. In 2019, it accounted for almost one in every four flights worldwide. Is this volume due to consumer preference, the geographic landscape, a lack of alternatives – or a combination of all three?

In other regions, such as Europe, China and Japan, high-speed rail is a viable and popular substitute to flying. The U.S., on the other hand, has yet to heavily invest in high-speed rail, despite the fact that it's almost always better on the environment compared to flying. According to EcoPassenger, a trip from London to Madrid emits an estimate of 43kg (95lb) of CO2 per passenger by train, compared to 118kg by plane.

Would you be willing to take a greener mode of transportation (instead of flight) even if it meant the travel time was longer? of all travelers would be willing to increase their travel time by 2 hours or more of millennial travelers would be willing to increase their total travel time by 2 hours or more of business travelers would be willing to increase

their total travel time by 2 hours or more

THE COST OF SUSTAINABILITY: WILL TRAVELERS PUT THEIR MONEY WHERE THEIR MOUTH IS?

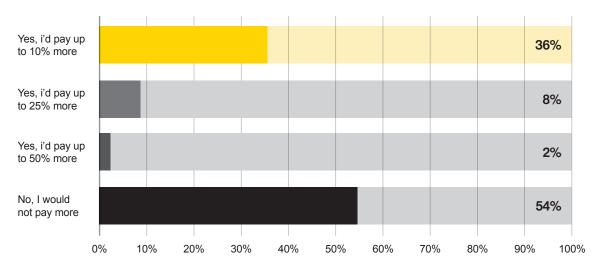
Everything comes at a price. The modern traveler constantly scours OTAs and metasearch engines for great rates and the best deals. OAG queried if the cost of environmental sustainability would impact consumer choices.

Surprisingly, almost half of all travelers (46%), along with 60% of millennials, said they would be willing to pay more for a flight that had a lower environmental impact compared to similar flight options.

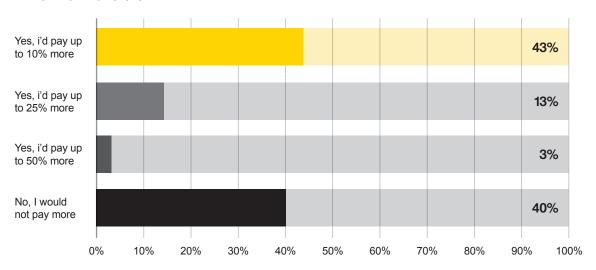


Would you be willing to pay more for a flight that had a smaller environmental impact than other similar flight options?

All Travelers

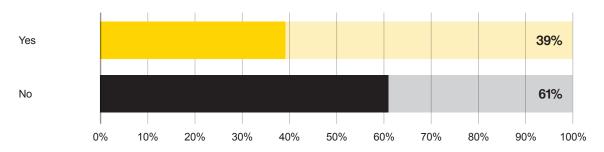


Millennial Travelers



Would you be willing to pay an extra flight tax for the research and development of carbon neutral air travel?

All Travelers



THE SUSTAINABILITY CONUNDRUM: AIR TRAVEL DEMAND GROWS FASTER THAN AIRLINES CAN REDUCE IMPACT

Airlines are continuing to build their carbon neutral credentials as they rebuild out from COVID-19:

- Accelerated retirement of older carbon "heavy" aircraft types
- Commitments to replace consider alternate modes of travel in domestic markets
- A reduction in net aviation CO2 emissions of 50% by 2050 relative to 2005 levels

The problem: Despite demand for environmentally-friendly options and commitments from carriers to reduce their footprint, more people are flying, every year – which severely reduces the impact of any systematic changes made by governments or carriers. Since 2000, the number of aircraft seats has grown at an average annual rate of 3.6% while available seat kilometers have increased 4.6%.

Put another way: the number of people flying is growing much faster than the industry is bringing down its CO2 emissions. The increased demand for air travel significantly stagnates global progress.

One creative and viral solution – which become popular in 2019, especially in Europe – was flight shaming. But despite the media attention, flight shaming really hasn't taken hold. Only 5% of people surveyed by OAG have been flight shamed in the past 12 months (and 33% have never even heard of it).

Even more alarming: only 27% of travelers said they plan to reduce the amount



AIRLINE COMMITMENTS AND EMERGING TECHNOLOGY



Several airlines have made pledges to become greener and reduce their impact. In February, Delta Air Lines announced its plan to invest \$1B over the next 10 years in technologies that mitigate emissions, both in the air and on the ground. Other carriers, like JetBlue, are offsetting their carbon dioxide emissions. United Airlines has shown their sustainability commitment by investing in biofuels.

For travelers, these efforts are a step in the right direction. OAG asked travelers to rank which change, in their opinion, would have the biggest impact on the environmental effects of air travel. In order, passengers chose:

- 1. Replacing traditional aircrafts with more carbon neutral ones
- 2. Investments in biofuel
- 3. Reducing the total number of routes/flights
- 4. Customer purchase options for carbon offsets

But for many climate change campaigners, off-setting isn't a solution. It is simply paying someone else to fix the problem or a business buying its way out of the issue. Few travelers are on board, either; they want airlines to take of the issue internally, versus adding yet another charge for the common traveler.

Looking into the future, many travelers are willing to explore new options for reducing the impact of flying. If made available in the next five years, 64% of people would be willing to fly in either a hybrid plane or an electric plane to reduce their climate impact.

Implementing electric or hybrid planes could strongly improve aviation sustainability – even electric taxiing could save almost 73lbs of CO2 a minute.

TRANSPARENCY IS KING FOR TRAVEL BOOKING

Airlines are not in this battle alone. Consumers expect the entire travel ecosystem – especially OTAs and travel search engines – to be more transparent about the sustainability impact of various travel options.

When asked what information, if made available, would influence their booking decisions:

- 32% of all travelers and 42% of millennial travelers said data on a flight's environmental impact/carbon emissions
- 39% of all travelers and 55% of millennial travelers said data on an airline's environmental impact/carbon emissions
- 26% of all travelers and 35% of millennial travelers said data on an airport's environmental impact

The availability of reliable, actionable and timely information has always been a competitive differentiator for travel providers, and sustainability will not be the exception. As mentioned earlier, more than half of all travelers, and nearly 70% of all millennials, would be more likely to use a site to plan and book travel if it provided sustainability-related information about their choices.

OAG expects that the availability of sustainability information will begin to shape where and how travelers plan trips. In order to win and retain customers, OTAs, travel technology providers and travel startups should invest to provide additional insight into sustainability practices and outcomes, and help their customers make informed, data-based decisions.



SUSTAINABILITY IMPACT OF COVID-19

In response to COVID-19, airlines will rise to the new challenges of sustainable aviation. Considering the immense social, health and economic ramifications across the world from a sustainability and environmental perspective, it's the only event in recent memory to actually reduce air travel on a global scale, and as a result, emissions.

- As of April 6, 2020: the number of scheduled global flights was down 48% compared to the same week in 2019
- At the start of the year, emission levels in China fell by 25%
- In 2020 there has been a 97% reduction in major wide-bodied four engine aircraft operations; many of which will never return

OAG'S TAKE

Pre-COVID-19, it was abundantly clear that sustainability was a pressing issue for the market, with many carriers making big investments to curb impact. As airlines rebuild, OAG expects to see the market take bolder steps to ingrain sustainability into operations and increase transparency.

While travelers want to see progress, they are not going to stop flying and they are unwilling to pay for additional taxes. The International Air Transport Association predicts passenger numbers will reach 8.2 billion by 2037. This creates both a challenge and an opportunity: how can the market reduce its impact when more people are flying than ever? And on the opportunistic side: travelers want to see progress – and the airlines, OTAs and providers that get out ahead of the issue will be best positioned to increase market share and customer loyalty.

To learn more about the complexities of reducing carbon impact in travel, view OAG's How Green Is Your Airline report. Read the full report here.

Demographics

Timing: January 2019 – February 2020 Respondents: 2,076 63% leisure vs. 37% business $8\% \le 34$ years old, 26% between 35-50 years old, $62\% \ge 51$ years old



Usage and attribution

This information can be reproduced either in whole or in part, online or in print, for non-commercial purposes only but must include attribution to OAG and a link to www.oag.com.

Disclaimer

The intended recipient ("The Customer") acknowledges that all data provided by or available through OAG is owned either by OAG Aviation Worldwide Ltd or by a third party provider ("The Owners") and that the customer shall not acquire any ownership or interest in such data.

© 2020 OAG Aviation Worldwide Limited. All rights reserved

OAG Blog

Sign up here: www.oag.com/blog-subscription